

IN THE CLAIMS

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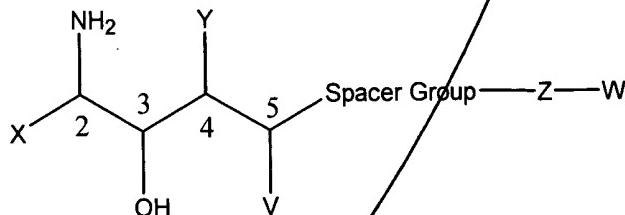
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TECH CENTER 1600/2900

Please cancel claims 1-8, and 10.

Please amend the claims as follows:

9. (amended) A method of treating a neoplastic condition or toxicity in a subject associated with an alteration in sphingolipid metabolism comprising administering an effective amount of a fumonisin analog of the formula:



wherein the spacer group is selected from the group consisting of alkyl (straight chain or branched, C₁ - C₂₀), hydroxyalkyl (straight chain or branched, C₁ - C₂₀) or dihydroxyalkyl (straight chain or branched, C₁ - C₂₀); Z is selected from the group consisting of H, O, NH, NQ, NQC(O), NHC(O), CO₂, C(O)NH, and C(O)NQ, wherein Q is an alkyl (straight chain or branched, C₁ - C₆); W is selected from the group consisting of no substituent, H, alkyl (straight chain or branched, C₁ - C₆), aryl (phenyl, substituted phenyl such as substitution with alkyl (straight chain or branched, C₁ - C₆) or halo), C(O)(CH₂)_nCO₂H (where n= 1 - 6), C(O) (CH₂)_nCW'CO₂ H, where W' is selected independently from H, alkyl (straight chain or branched, C₁ - C₆), aryl (phenyl, substituted phenyl such as substitution with alkyl (straight chain or branched, C₁ - C₆) or halo), and (CH₂)_nCO₂ H, wherein n= 1 - 6; X is selected from the group consisting of H, methyl, CH₂ OH (and esters thereof), CH₂ NQ'₂ (where Q' is selected independently from H, alkyl (straight chain or branched, C₁ - C₂₀), and acyl (C(O)Q" where Q" is an alkyl, straight chain or branched, C₁ - C₂₀)); and V and Y are independently selected from the group consisting of H or OH (and esters thereof).

11. (amended) The method of Claim 9, wherein Neimann-Picks syndrome or Tay-Sachs

disease is treated.

the subject has

rjg
DJ
12. (amended) The method of Claim 9, wherein the fumonisin analog is administered in
an amount between 5 and 500 mg.

13. (amended) The method of Claim 9, wherein the fumonisin analog is administered in
an amount between 25 and 75 mg.

14. (amended) The method of Claim 9, wherein X is CH₂ OH or an ester thereof.

C2
15. (amended) The method of Claim 9, wherein the fumonisin analog has a 2-amino-3,5-
diol head group.

D3
16. (amended) The method of Claim 9, wherein the fumonisin analog is Fumonisin B₁.
no support for base

C3
17. (amended) The method of Claim 9, wherein the fumonisin analog is Fumonisin B₂.

Please add the following claims:

C4
47. (new) The method of Claim 9, wherein the neoplastic condition is esophageal
cancer.

48. (new) The method of Claim 9, wherein the subject is a human.

49. (new) The method of Claim 9, wherein V is hydroxyl.

50. (new) The method of Claim 9, wherein V is hydrogen and Y is hydrogen.

51. (new) The method of Claim 9, wherein V is hydroxyl and Y is hydrogen.

52. (new) The method of Claims 50 or 51, wherein X is methyl.

C4
53. (new) The method of Claim 9, wherein the spacer group is alkyl, Z is hydrogen and W is no substituent.

54. (new) The method of Claim 9, wherein Y is hydrogen, V is hydroxyl, Z is hydrogen and the spacer group is C₁- C₂₀.

55. (new) The method of claim 9, wherein Z is hydrogen.

56. (new) The method of claim 9, wherein the spacer group is alkyl (straight chain or branched, C₁ - C₂₀).

57. (new) The method of claim 9, wherein W is no substituent.

REMARKS

After entry of the amendment, claims 9, 11-18, and 47-57 remain pending.

Invention

Applicants provided the fundamental discovery that the biochemical action of fumonisins is that they affect the biosynthetic pathway of sphingolipids. Until the time of the invention, the mechanism of action of fumonisins was unknown in the art.